## **IN THE ABSTRACT**:

A device for regulated heating of media in a dental handpiece (1) has at least one media line (10) which can be opened via a switch (32), a heating element (12, 31) associated with the media line (10), a temperature sensor (13, 34) detecting the temperature of the medium and a regulation circuit (33) which is connected with the temperature sensor (13, 34) and controls the heating element (12, 31) in dependence upon the sensor signals. After an actuation of the switch (32) the heating element (12, 31) is operated for a short period of time at a predetermined heating power independent of the output signal of the regulation circuit (33), in order to heat the medium as rapidly as possible to the required temperature.

[Fig. 2]